

ABSTRACT OF THE DISCLOSURE

Methods for breeding mutagenized mice permit detection of genetic loci that in heterozygous mutated form can modify a known index phenotype involves crossing a mutagenized founder 5 strain and a second strain of mice carrying an allele at a locus that confers the index phenotype. In the test generation, clusters of individuals are observed to deviate from the typical phenotype. The genetic material and molecules encoded thereby can be obtained using available methods.

10 Improved and compact methods are also disclosed.